

### **REMARKS**

In the Office Action, the Examiner rejected claims 1-44. By the present Response, Applicants have amended claims 1, 12, 23, 32 and 39. Claims 1-44 remain pending in the present application. In view of the foregoing amendments and the following remarks, Applicants respectfully request reconsideration and allowance of the instant claims.

### **Non-Statutory Doubling Patenting**

In the Office Action, the Examiner rejected claims 1-38 under the judicially created doctrine of obviousness-type doubling patenting as being unpatentable over claims 1-20 of U.S. Patent No. 6,667,879. Although Applicants do not agree with the Examiner's rejection, Applicants, nonetheless, will strongly consider filing a terminal disclaimer once the allowability of the pending claims has been determined. Accordingly, Applicants respectfully request that the Examiner hold the double patenting rejection in abeyance until the allowability of the presently pending claims is finally determined.

### **Rejections Under 35 U.S.C. § 102**

In the Office Action, the Examiner rejected all of the pending claims under 35 U.S.C. § 102 as anticipated by various references. However, as discussed in further detail below, Applicants respectfully assert that the instant claims are patentable over the cited references, because the pending claims recite features not disclosed in these cited references.

Anticipation under Section 102 can be found only if a single reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 227 U.S.P.Q. 773 (Fed. Cir. 1985). Thus, for a prior art reference to anticipate under Section 102, every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). Moreover, the prior art reference also must show the

*identical* invention “*in as complete detail as contained in the ... claim*” to support a *prima facie* case of anticipation. *Richardson v. Suzuki Motor Co.*, 9 U.S.P.Q. 2d 1913, 1920 (Fed. Cir. 1989) (emphasis added). Accordingly, Applicants need only point to a single element not found in the cited reference to demonstrate that the cited reference fails to anticipate the claimed subject matter.

Furthermore, Applicants respectfully remind the Examiner that, during patent examination, the pending claims must be given an interpretation that is reasonable and consistent with the specification. *See In re Prater*, 162 U.S.P.Q. 541, 550-51 (C.C.P.A. 1969); *see also In re Morris*, 44 U.S.P.Q.2d 1023, 1027-28 (Fed. Cir. 1997); *see also* M.P.E.P. §§ 608.01(o) and 2111. Indeed, “claims are not to be read in a vacuum, and limitations therein are to be interpreted in light of the specification in giving them their ‘broadest reasonable interpretation’.” *In re Marosi*, 218 U.S.P.Q. 289 (Fed. Cir. 1983) (quoting *In re Okuzawa*, 190 U.S.P.Q. 464, 466 (C.C.P.A.)). Moreover, interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach. *See In re Cortright*, 49 U.S.P.Q.2d 1464, 1468 (Fed. Cir. 1999); *see also* M.P.E.P. § 2111. With the foregoing in mind, Applicants respectfully assert that the cited references do not anticipate the instant claims.

#### **First Rejection Under Section 102**

In Office Action, the Examiner rejected claims 1-5, 7, 10, 23-26 and 30 under 35 U.S.C. § 102(b) as anticipated by the Howell et al. reference (U.S. Patent No. 6,069,790). Applicants, however, respectfully assert that amended independent claim 1 and its respective dependent claims 2-5, 7 and 10 and amended independent claim 23 and its respective dependent claims 24-26 and 30 are not anticipated by the Howell et al. reference, because these claims recite features not disclosed by the Howell et al. reference.

For example, amended independent claim 1 recites, *inter alia*, first and second actuators “having generally linear path[s] of travel,” and the Howell et al. reference does not disclose at least these features. (Emphasis added.) Additionally, amended independent claim 23 recites first and second actuators moveable in first and second linear paths, respectively. Again, the Howell et al. reference does not disclose at least these features. In stark contrast, the Howell et al. reference discloses, at best, pivoting actuators. The device of Howell et al. includes a handle 38 and arm 40 that pivot about pivot pin 48. See Howell et al., Fig. 3; col. 3, ll. 9-20; col. 3, ll. 52-55. By pivoting the handle 38 and the arm 40 of the Howell et al. device, the ejection arm 36 and the latch 56 also pivot, to release and eject a component from the assembly. See *id.* Thus, the device of Howell et al. actuates a lever and/or a latch solely through the use of *pivotal* motion, which is antithetical to the linear path of travel recited in claims 1 and 23. Indeed, the Howell et al. reference does not disclose a device that has an actuator with a linear path of travel, let alone first and second actuators that have a linear paths of travel. Thus, Applicants respectfully assert that the Howell et al. reference does not disclose all of the features recited in independent claims 1 and 23.

Therefore, Applicants respectfully assert that the Howell et al. reference does not anticipate independent claims 1 and 23. With the foregoing in mind, Applicants respectfully request reconsideration and allowance of independent claim 1 and its respective dependent claims 2-5, 7 and 10 and independent claim 23 and its respective dependent claims 24-26 and 30.

### **Second Rejection Under Section 102**

In the Office Action, the Examiner rejected claims 1, 6, 8-11, 23, 27 and 29-31 under 35 U.S.C. § 102(b) as anticipated by the Lwee reference (U.S. Patent No. 5,299,089). In rejecting claim 1, the Examiner stated as follows:

Lwee teaches a latch mechanism (1, fig. 1) for a removable component (4, fig. 6) of an electronic device (not shown, see col. 1, lines 9-15), comprising:

a retention latch (104, fig. 1), a leveraging release member (56, fig. 1), and a multi-stage actuator (54, fig. 1) comprising: first actuator member (104, fig. 1) engageable in a first position (figs. 11 and 12) to move the retention latch, and a second actuator member (62, fig. 1) engageable in a second position to move the leveraging release member (claim 1).

Office Action mailed August 2, 2004, pp. 4-5 (emphasis added). Additionally, in rejecting independent claim 23, the Examiner stated as follows:

Lwee teaches a computer chassis (1, fig. 1) comprising:

a support structure (12, fig. 1) having a receptacle (22, fig. 1) adapted to receive a removable component (35, fig. 6), a component retention latch (104, fig. 1) adapted to latch the removable component removably within the receptacle (see col. 8, lines 44-49), a component release lever (56, fig. 1) adapted to leverage the removable component out of the receptacle, a first actuator (104, fig. 1) movable in a first path (110, fig. 11) adapted to unlatch the component retention latch from the removable component (shown in fig. 11), and a second actuator (62, fig. 1) movable in a second path (Y-direction in fig. 1) adapted to bias the lever against the removable component (claim 23).

*Id.* at p. 9 (emphasis added). Applicants, however, respectfully assert the amended claim 1 and its respective dependent claims 6 and 8-11 and amended independent claim 23 and its respective dependent claims 27 and 29-31 are not anticipated by the Lwee reference, because these claims recite features not disclosed by the Lwee reference. Moreover, Applicants respectfully disagree with the Examiner's assertions and contentions regarding the Lwee reference.

By way of example, the Lwee reference does not disclose a “first actuator having a generally linear path of travel and being engageable in a first position,” as recited in amended independent claim 1, and the Lwee reference does not disclose first and second actuators moveable in first and second linear paths, respectively, as recited in independent claim 23. In stark contrast to the subject matter of claims 1 and 23, the Lwee reference discloses, at best, pivoting actuators. The Lwee reference discloses a handle 104 that pivots in the direction of arrow 110 of Fig. 11. *See* Lwee, Fig. 1; col. 8, ll. 40-44. And the pivotal movement of the handle effectuates actuation of the lever 56. *See id.* Indeed, the Lwee reference explicitly identifies the enumerated as 104 as a “pivot member.” *See id.* at col. 8, ll. 23-24. Thus, even if, *arguendo*, one were to equate the handle 104 (i.e., pivot member 104) of the Lwee device to the first actuator recited in independent claim 1, the handle 104 does not have a generally linear path of travel as is recited in amended independent claims 1 and 23.

Furthermore, Applicants respectfully disagree with the Examiner’s assertion that element 104 of the Lwee reference discloses both the retention latch and the first actuator recited in independent claim 1. Respectfully, Applicants assert that the handle 104 of the Lwee device cannot anticipate both a latch and a first actuator for moving the latch, because this handle 104 cannot move itself. Indeed, it is impossible for a latch to actuate itself without another component.

Therefore, Applicants respectfully assert that independent claim 1 and its respective dependent claims 6 and 8-11 and independent claim 23 and its respective dependent claims 27 and 29-31 are not anticipated by the Lwee reference. With the foregoing in mind, Applicants respectfully request reconsideration and allowance of claims 1, 6, 8-11, 27 and 29-31.

**Third Rejection Under Section 102**

In the Office Action, the Examiner rejected claims 12-17, 20-22, 32-35, 38-40 and 43-44 under 35 U.S.C. § 102(b) as anticipated by the Tirrell et al. reference (U.S. Patent No. 5,828,546). In rejecting independent claim 12, the Examiner stated as follows:

Tirrell teaches a computer drive (35, fig. 2) comprising:  
a drive chassis (1, fig. 1a), a latch (16, fig. 1a) moveable between released (fig. 1a) and secured positions (fig. 3) against the drive chassis, a lever (10, fig. 1a) movable between unleveraged (fig. 1a) and leveraged positions (not shown) against the drive chassis, a first actuator (one end of 16, fig. 1a) engageable with the latch to move the latch from the secured position to the released position, and a second actuator (10a, fig. 5) engageable with the lever after the latch has been moved to the released position to move the lever from the unleveraged position to the leveraged position (claim 12).

Office Action mailed August 2, 2004, pp 5-6 (emphasis added). Furthermore, in rejecting claims 32-35, 38 40 and 43-44, the Examiner stated that the Tirrell et al. reference discloses as follows:

a method of operating and manufacturing a mechanism for releasably mounting a drive into a computer chassis as set forth in claims 32-35 and 38 being disposed in the specification (claims 32-35, 38-40 and 43-44).

*Id.* at p. 7. Applicants, however, respectfully assert that amended independent claims 12, 32 and 39 and their respective dependent claims are not anticipated by the Tirrell et al. reference, because this reference does not disclose all of the features recited in the instant claims.

**Independent Claims 12, 32 and 39 and the Claims Depending Therefrom**

For example, the Tirrell et al. reference does not disclose “a second actuator configured to engage with the lever after the latch has been moved to the released position to move the lever from the unleveraged position to the leveraged position,” as recited in amended independent claims 12 and 39, and the Tirrell et al. reference does not

disclose “[a] the second actuator [that] engages the drive release lever after release of the drive retention latch,” as recited in amended independent claim 32. (Emphasis added.) Rather, in the device of Tirrell et al., the ejector arm 10 that provides the leverage for removal of a component is not acted upon by any other component and is only acted upon by the user to effectuate movement. See Tirrell, col. 6, ll 10-25; FIG. 1a. The Tirrell et al. device includes an integral ejector arm 10 that provides leverage for removing a computer component, and this arm does not engage with an actuator to move the lever. See *id.* In other words, the Tirrell et al. reference does not disclose an actuator that engages with a lever to move the lever, as is recited in claims 12, 23 and 39. Thus, the Tirrell et al. reference, at a minimum, does not disclose the second actuator as recited in independent claims 12, 23 and 39.

Furthermore, even assuming, *arguendo*, that the Tirrell et al. reference discloses a second actuator as recited in claims 12, 32 and 39, the Tirrell et al. reference does not disclose a second actuator that engages the ejector arm 10 after the latch has been moved to the released position, as recited in these claim. As discussed above, the ejector arm 10 of the Tirrell et al. device is an integral unit, and, as such, any alleged actuator would always be engaged with the ejector arm 10. That is to say, every portion of the ejector arm is always engaged with every other portion, and, as such, a first portion of the arm cannot be equated with an actuator that engages with a second portion of the arm after a certain event. Thus, any alleged actuator cannot engage the arm after a latch has been moved to the released position. Therefore, the Tirrell et al. reference does not and cannot disclose a “second actuator configured to engage with the lever after the latch has been moved to the leveraged position,” as recited in independent claims 12, 32 and 39. (Emphasis added.)

Therefore, Applicants respectfully assert that the Tirrell et al. reference does not anticipate independent claim 12 and its respective dependent claims 13-17 and 20-22, independent claim 32 and its respective dependent claims 33-35 and 38 and independent

claim 39 and its respective dependent claims 40, 43 and 44. With the foregoing in mind, Applicants respectfully request reconsideration and allowance of claims 12-17, 20-22, 32-35, 38 and 39.

#### **Fourth Rejection Under Section 102**

In the Office Action, the Examiner rejected claims 12, 19, 32, 37, 39 and 42 under 35. U.S.C. § 102(b) as anticipated by the Sheppard et al. reference (U.S. Patent No. 5,319,519). In rejecting independent claims 12, 32 and 39, the Examiner alleged that the Sheppard et al. reference discloses as follows:

a drive chassis (18, fig 4A), a latch (106, fig. 4B) movable between released and secured positions (figs. 5A and 5B) against the drive chassis, a lever (98, fig. 4B) movable between unleveraged and leveraged positions (figs. 5B and 5A) against the drive chassis, a first actuator (120, fig. 4B) engageable with the latch to move the latch from the secured position to the released position, and a second actuator (78, fig. 4B) engageable with the lever after the latch has been moved to the released position to move the lever from the unleveraged position to the leveraged position (claims 12, 32 and 39).

Office Action mailed August 2, 2004, p. 7. Applicants, however, respectfully assert that amended independent claims 12, 32 and 39 and their respective dependent claims are not anticipated by the Sheppard et al. reference, because this reference does not disclose all of the features recited in the claims 12, 32 and 39.

#### **Independent Claims 12, 32 and 39 and the Claims Depending Therefrom**

For example, the Sheppard et al. reference does not disclose “a second actuator configured to engage with the lever after the latch has been moved to the released position to move the lever from the unleveraged position to the leveraged position,” as recited in amended independent claims 12 and 39, and the Sheppard et al. reference does not disclose “[a] the second actuator [that] engages the drive release lever after release of the drive retention latch,” as recited in amended independent claim 32. (Emphasis



added.) In stark contrast, the Sheppard et al. reference discloses an assembly in which all of the actuators are continuously engaged with the drive release lever. The Sheppard et al. reference discloses an assembly having a plurality of components that are pivotably pinned to one another to operate. *See* Sheppard et al., Fig. 5A. For example, in the Sheppard et al. device, the actuator 78 is continuously coupled to the left and right latches 98 and 101. *See id.* at col. 4, ll. 21-31; col. 8, l. 57 to col. 9, l. 3. Thus, when a user manually presses end cap 78 of the Sheppard et al. device, the push rod 68 moves and causes all of the downstream components (i.e., latches 98 and 100, the pushers 99 and 100, the linkage member 120, etc.) to move as well. *See id.* Accordingly, the Sheppard et al. reference does not and cannot disclose a second actuator that is configured to engage a lever after the latch has been moved to the released position, because the foregoing components of the Sheppard device are engaged with one another regardless if any latch (e.g., element 98 and 101) is in an engaged or disengaged position.

Therefore, Applicants respectfully assert that the Sheppard et al. reference does not anticipate independent claim 12 and its respective dependent claim 19, independent claim 32 and its respective dependent claim 37 and independent claim 39 and its respective dependent claim 42. With the foregoing in mind, Applicants respectfully request reconsideration and allowance of these claims 12, 19, 32, 37, 39 and 42.

#### **Fifth Rejection Under Section 102**

In the Office Action, the Examiner rejected claims 12, 18, 32, 36, 39 and 41 under 35 U.S.C. § 102(e) as anticipated by the Cheng reference (U.S. Patent No. 6,469,900). In rejecting independent claims 12, 32 and 39, the Examiner stated that the Cheng discloses the following:

a drive chassis (110, fig. 2), a latch (202, fig. 2)  
movable between released and secured positions (figs. 3A  
and 2) against the drive chassis, a lever (212, fig. 2)  
movable between unleveraged and leveraged positions  
(figs. 3A and 3B) against the drive chassis, a first actuator

(112, fig. 2) engageable with the latch to move the latch from the secured position to the released position, and a second actuator (114, fig. 2) engageable with the lever after the latch has been moved to the released position to move the lever from the unleveraged position to the leveraged position (claims 12, 32 and 39).

Office Action mailed August 2, 2004, p. 11 (emphasis added). Applicants, however, respectfully assert that amended independent claims 12, 32 and 39 and their respective dependent claims are not anticipated by the Cheng reference, because this reference does not disclose all of the features recited in these claims.

**Independent Claims 12, 32 and 39 and the Claims Depending Therefrom**

For example, the Cheng reference does not disclose a lever as is recited in amended independent claims 12, 32 and 39. Independent claims 12, 32 and 39 recite as follows:

Claim 12: “a lever movable between unleveraged and leveraged positions against the drive chassis...and a second actuator configured to engage with the lever after the latch has been moved to the release position to move the lever from the unleveraged position to the leveraged position;”

Claim 32: “disposing a second actuator for engagement of a drive release lever;” and

Claim 39: “providing a lever movable between unleveraged and leveraged positions against the drive.”

(Emphasis added.) Respectfully, Applicants assert that the Cheng reference does not, at a minimum, disclose these features.

However, prior to addressing the substance of the Cheng reference, Applicants respectfully reiterate that a claim term must be given its broadest reasonable interpretation. *See In re Prater*, 162 U.S.P.Q. at 550-51 (C.C.P.A. 1969); *see also In re Morris*, 44 U.S.P.Q.2d at 1027-28 (Fed. Cir. 1997); M.P.E.P. §§ 608.01(o) and 2111.

With this in mind, Applicants note that a lever, by its ordinary meaning, is defined as “[a] simple machine consisting of a rigid bar pivoted on a fixed point and used to transmit force.” AMERICAN HERITAGE COLLEGE DICTIONARY 796 (4th ed. 2002).

As quoted above, the Examiner contends that element 212 of the Cheng reference discloses the “lever” recited in independent claims 12, 32 and 39. Respectfully, Applicants assert this element (i.e., element 212 of Cheng) is not a lever, because it does not pivot. In the device of Cheng, element 212 is a push rod that is fixedly coupled to push arm 214 and button 114. *See* Cheng, col. 3, ll. 50-59. In operation, when a user actuates button 114 of the Cheng device in a given direction over a given distance, the fixedly coupled push rod 212 and push arm 214 move in this same direction and over the same distance. *See id.* Indeed, at no time does the push rod 212 of Cheng pivot with respect to any other element. Moreover, the push rod 212 of the Cheng device provides no mechanical advantage (i.e., leverage) to the user. Thus, Applicants respectfully assert that the push rod 212 cannot be equated to a “lever” as recited in the instant claims. As such, Applicants respectfully assert that the Cheng reference does not disclose all of the features recited in independent claims 12, 32 and 39.

Therefore, Applicants respectfully assert that the Cheng reference does not anticipate independent claim 12 and its respective dependent claim 18, independent claim 32 and its respective dependent claim 36 and independent claim 39 and its respective dependent claim 41. With the foregoing in mind, Applicants respectfully request reconsideration and allowance of claims 12, 18, 32, 36, 39 and 41.

#### **Sixth Rejection Under Section 102**

In the Office Action, the Examiner rejected claims 23 and 28 under 35 U.S.C. § 102(b) as anticipated by the Karidis et al. reference (U.S. Patent No. 5,793,607). In rejecting independent claim 23, the Examiner stated that the Karidis et al. reference discloses as follows:

a support structure (12, fig. 1) having a receptacle (11, fig. 2) adapted to receive a removable component (14, fig. 2), a component retention latch (44, fig. 2) adapted to latch the removable component removably within the receptacle (see col. 3, lines 5-7), a component release lever (30, fig. 1) adapted to leverage the removable component out of the receptacle, a first actuator (21, fig. 1) movable in a first path (in and out, fig. 1) adapted to unlatch the component retention latch from the removable component (shown in fig. 3), and a second actuator (20, fig. 1) moveable in a second path (in and out, fig. 1) adapted to bias the lever against the removable component (claim 23).

Office Action mailed August 2, 2004, p. 10 (emphasis added). Applicants, however, respectfully assert that amended independent claim 23 and its respective dependent claim 28 are not anticipated by the Kardis et al. reference, because this reference does not disclose all of the features recited in amended independent claim 23.

However, prior to addressing the substance of the Karidis et al. reference, Applicants respectfully reiterate that a claim term must be given its broadest reasonable interpretation. *See In re Prater*, 162 U.S.P.Q. at 550-51 (C.C.P.A. 1969); *see also In re Morris*, 44 U.S.P.Q.2d at 1027-28 (Fed. Cir. 1997); M.P.E.P. §§ 608.01(o) and 2111. With this in mind, Applicants note that “to latch,” by its ordinary meaning, is defined as “to close or lock with.” AMERICAN HERITAGE COLLEGE DICTIONARY 782 (4th ed. 2002).

As quoted above, the Examiner contends that element 44 of the Karidis et al. reference discloses the component retention latch recited in claim 23. However, Applicants respectfully assert that this element of Karidis et al. device does not latch the removable component as recited in claim 23. As discussed further below, the device of Karidis et al. does not include a component that latches a removable component removably within a receptacle. Rather, the device of Karidis et al., at best, includes a mechanism for preventing accidental actuation of the ejection mechanism and, in turn, unwanted ejection of the removable component.

In the device of Karidis et al., PCMCIA cards 14 and 16 are disposed within the housing 11 when installed with respect to the chassis 10. *See* Karidis et al., col. 2, ll. 20-29. To facilitate removal of the PCMCIA cards, the device of Karidis has an ejection mechanism 18 that includes a pivoting actuator arm 30 coupled to a shaft 24 that, in turn, is coupled to a common selector 20. *See id.* at col. 2, ll. 49-65; Fig. 1. Thus, in the device of Karidis et al., by actuating the common selector 20, a user can direct the shaft to cause movement of the pivoting actuator arm to leverage the PCMCIA card 14 or 16 into a disengaged position. *See id.*

To prevent inadvertent actuation of the pivoting actuator arm 30, the device of Karidis et al. includes a radial extension 22 that is located on the common selector 20 and that engages a flap 44 on the housing 11, thereby attaining a “parked position” for the common selector 20. *See* Karidis et al., col. 3, ll. 20-30. Thus, in the device of Karidis et al., the flap 44 and the radial extension 22 engage with one another to prevent undesired actuation of the pivoting actuator arm 30. However, neither the flap 44 nor the radial extension 22 engages with the PCMCIA cards 14 and 16, let alone latches the PCMCIA cards 14 and 16. Rather, and again, the engagement between radial extension and the flap of the Karidis et al. device prevents movement of the pivoting actuating arm 30. Thus, this engagement hinders accident removal of the PCMCIA card 14 and 16 of the Karidis et al. device with respect to the housing 11 through inadvertent actuation of the ejection mechanism 18, thereby “holding” the PCMCIA in place. Indeed, there is no reason to believe that either the flap 44 or the radial extension 22 of the Karidis et al. device engages with the PCMCIA cards 14 and 16 whatsoever. Moreover, Applicants respectfully assert the Examiner’s assertion that the flap 44 *latches* a removable component within a receptacle of a support structure is speculative at best.

Therefore, Applicants respectfully assert that the Karidis et al. reference does not anticipate independent claim 23 and its respective dependent claim 28. With the

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foregoing in mind, Applicants respectfully request reconsideration and allowance of  
claims 23 and 28.

**Conclusion**

Applicants respectfully submit that all pending claims should be in condition for allowance. However, if the Examiner believes certain amendments are necessary to clarify the present claims or if the Examiner wishes to resolve any other issues by way of a telephone conference, the Examiner is kindly invited to contact the undersigned attorney at the telephone number indicated below.

Respectfully submitted,

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